

REMARKS

In accordance with the foregoing, claim 5 has been cancelled, claims 1-3 and 7 have been amended and new claims 8-10 have been added. Claims 1-3 and 7-10 are pending and under consideration.

Claims 1-3, 5 and 7 are rejected under 35 USC §103(a) as being obvious over Japanese Patent Publication No. 2003-261695 to Enokida et al. in view of US Patent No. 6,238,793 to Takahashi et al.

Enokida et al. discloses a PET polyester resin composition in which a sheet silicate is distributed. The sheet silicate is added in an amount of from 0.1 to 1.0 wt %. The sheet silicate is organically modified with an onium salt. Enokida et al. also uses a dispersibility improver, which the Examiner equates to the claimed non-ionic surfactant.

However, there are several deficiencies in Enokida et al. First, with regard to the organic onium salt, the Examiner cites paragraph [0016] of Enokida et al.

This paragraph mentions that a dihydroxyethyl methyl octadecyl ammonium may be used as a fourth-class ammonium ion. The Examiner apparently believes that a salt of this ion corresponds with the claimed methyl octadecyl dihydroxyethyl ammonium chloride. However, there are differences between the claimed organic onium salt and the compound disclosed in Enokida et al. Specifically, the reference does not describe a chloride salt.

New independent claim 10 is directed to a resin product containing an aliphatic polyester and 4.5 to 20 wt % of the composite material. Antecedent support for the content of the composite material can be found from page 19, line 18 through page 20, line 6. As mentioned above, Enokida et al. uses 0.1 to 1.0 wt % of the sheet silicate. Enokida et al. does not disclose or suggest 4.5 to 20 wt % of the claimed composite material. Even if one assumes that the 0.1 to 1.0 wt % of Enokida et al. does not include a surfactant, the Enokida et al. product still contains more resin and less composite material additive than the present invention.

Moreover, new independent claim 10 recites that the composite material contains 100 parts by weight of the organically modified layered silicate and greater than 100 parts by weight to 200 parts by weight of the nonionic surfactant. As described by the Examiner, the Enokida et al. product contains 0.1 to 1.0 wt% of the sheet silicate and 0.001 to 1.0 wt% of the surfactant. To the contrary, as described in paragraph [0027] and the examples of the application, the present invention may employ significantly more surfactant than is used in Enokida et al.

In the Office Action, the Examiner admits that Enokida et al. does not disclose the claimed surfactant. For this purpose, the Examiner cites Takahashi et al. However, Takahashi et al. relates to a polyethylene-lamellar silicate composite material. To the contrary, the claims have

been amended such that each clearly requires an aliphatic polyester-silicate composite material. As described in Enokida et al., the surfactant is used to improve compatibility and dispersibility between the resin and the sheet silicate. It is submitted that there are significant differences between a polyester and a polyethylene that render the combination of references non-obvious. Even if a surfactant works well with polyethylene, this does not mean that the same surfactant can be used with polyester. It is improper for the Examiner to simply substitute the polyethyleneglycol oleyl ether, for example, disclosed in Takahashi et al. for the dispersibility improver disclosed in Enokida et al.

Because the purpose of using a surfactant is to improve the dispersibility of the layered silicate in the resin, properties such as the coefficient of friction, are very important. For example, although soap might make a smooth surface very slippery, there is no reason to expect that the soap would have the same effect on a rough surface. Although the claims are not related to human sutures, it has been found that a braided polyethylene suture has a significantly lower friction coefficient than a coated polyester suture. See The Journal of Hand Surgery, vol. 34, issue 1, pages 87-92. Further, being filed herewith is a whitepaper written for the World Health Organization describing the differences between polyester and polyethylene nets. Because of the differences between polyesters and polyethylene, it is submitted that it would not have been obvious to replace the Enokida et al. surfactant with the Takahashi et al. surfactant.

In view of all of the above reasons, it is submitted that the prior art rejection should be withdrawn. There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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